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NOTES ON MASSAGE

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MASSAGE, or systematic rubbing and manipulation of the soft tissues of the body, which is often combined with passive, active, and resistive movements, is probably one of the oldest means of relieving bodily infirmities. Some sort of massage and similar exercises have probably been practised at all times, and among a great number of races. The oldest record there is of massage dates back three thousand years, and was written by the Chinese. In Japan, at the present time, massage is almost exclusively practised by blind men.

About two centuries ago the Chinese book on massage was translated into French, and to this is probably due the foundation of our modern massage and the so-called Swedish movements. This also accounts for the use of the terms "effleurage," "petrissage," etc. Somewhat later it is heard of among the Scandinavians and Germans, by whom it was elaborated scientifically. At the beginning of last century, Peter Henry Ling, of Stockholm, introduced his system of movements—not that he had originated, but only systematized them. It remained for Dr. Mezger, of Amsterdam, Holland, to revive massage and put it on a scientific basis. Through his successful work during the years of 1860 to 1874 massage became a recognized treatment everywhere, and, although it is not a cure for every ill, it has proved a successful remedy in such a variety of cases as to show its efficacy.

In massage the skin, muscles, and tissues are stroked, kneaded, squeezed, rolled, and tapped, with the result that

- (1) The function of the skin is improved;
- (2) The flow of the blood and lymph is accelerated;
- (3) Blood is attracted to the surface from internal parts;
- (4) Nerves are stimulated or soothed, as the case may be;
- (5) Effete matter is evacuated;
- (6) Adhesions of soft parts are broken down;
- (7) Swelling and thickening of tissues are reduced;
- (8) Nutrition is improved.

Massage is highly recommended in constitutional ailments as an auxiliary agent to the recuperative power of the body. In disorders

of the digestive and circulatory organs massage will always be found beneficial. Great benefit is derived from massage in disorders of the nervous system, as it has both a sedative and stimulating effect—soothing when applied lightly, stimulating when given with greater force. Invaluable is massage in diseases or injuries affecting the muscles, bones, or joints, such as synovitis, dislocations, sprains, fractures, and rheumatism. In the last-named condition it is often combined with passive, active, and resistive movements. Various forms of neuralgia also yield to the treatment of massage.

Contraindications are acute inflammation, fever, and pus.

The word “massage” is derived from a Greek word, meaning “to knead,” and from an Arabic word, signifying “to press.” As I have already stated, it has come to us through the French; hence the following terms:

Effleurage—Friction.

Petrissage—Tapotement.

Under the head of *Effleurage* come all stroking movements, which may be carried out either with the slightest touch of the fingers or with various degrees of pressure, exerted by the whole surface of the hand. *Effleurage* acts upon the skin, superficial fascia, and cutaneous nerves, and through the latter impulses are sent to the more deeply-seated nerves. It also stimulates superficial circulation. *Effleurage* is always the beginning and the ending of a massage treatment.

Petrissage is the most important movement in massage. The muscles and tissues are stretched and lifted from the bones; the nerves, blood-vessels, lymph-vessels, and glands are stimulated by alternate compression and relaxation; lymph is forced out of spaces and into lymphatics. By the same compression and relaxation, veins are alternately emptied and filled, so that effete matter is sent onward and a supply of fresh blood is favored. The muscles must be thoroughly gripped and well kneaded, without exerting unnecessary force.

Friction differs from *petrissage* proper in that the muscles are not raised or drawn from the bone. It is done with the cushion of the thumb, or of the fingers, or with the heel of the hand. The cushion of the thumb is placed on the desired spot, describing circles on it without moving the skin. The tissues underneath are worked on each other. The effect of this movement is to squeeze and move on the products of inflammation, to aid absorption, and to stimulate local circulation. Friction should always be interrupted at short intervals by centripetal stroking (*effleurage*).

Tapotement is done with both hands, either simultaneously or alternately, and is carried out by the following methods:

I. With the tips of the fingers, a movement principally applied to the head.

II. With the palmar surface of the hands. The fingers, held straight and close together, strike the muscles evenly and rhythmically, moving in every direction. This movement is suitable and agreeable over the whole body.

IIa. The palms are contracted, so as to form a hollow, or cup. It is used on the abdomen, the thigh, and the back.

III. With the ulnar border of fingers and hands, alternately. This is mostly used on the patient's back.

IV. With the ulnar border of the closed hand; alternately, if both hands are worked. To be applied to arms and legs, but principally to thighs.

V. With the clenched hands, working alternately, used on thighs and buttocks.

With the exception of the last-mentioned method, all *tapotement* should be light, sharp, and springy, performed rhythmically and rapidly. *Tapotement* excites capillary circulation, stimulates nerves, and causes muscles to contract. *Tapotement* is not always used, but chiefly when it is desired to add strength to the treatment.

Massage should never be given except on a physician's orders. When employed as a treatment after injuries and diseases, it should be in the hands of a person who not only possesses the necessary technical skill acquired by painstaking toil in massage, but who has also a thorough knowledge of the movement cure, and understands the nature and course of the disease as well. Massage is either general or local: general, when applied to the whole body; local, when applied to a particular part of the body.

General Massage: Begin with *effleurage* on dorsum and sole of *foot*, followed by thorough kneading and pressing. Apply *tapotement* to sole. Centripetal stroking (*effleurage*) of *leg*, followed by kneading, and more or less friction, as the case may call for; *tapotement* to the *thigh*. For the *back*, begin with *effleurage* at the base of the skull, employing both hands, and, as they are brought downward, an alternate lateral movement is executed. The same movement can be made upward, kneading with the palms of the hands outward from the spine over the entire back and intercostal spaces, digital friction and *tapotement* following. In some cases special pressure or vibration is applied on both sides of the spinous processes. The manipulations

for the *lower part of the back* are effleurage, kneading as well as tapotement with the ulnar side of the hands over the sacrum. The manipulations on the gluteal muscles should be deep and strong, to penetrate all the deep muscular layers: stroking, kneading, friction with thumb and heel of hand, and tapotement with the clenched hand.

Hands and Arms: Effleurage to each finger separately, friction with the thumb between each metacarpal; on the back of the hand; then the balls of the little finger and thumb are kneaded. Effleurage of the arms follows, by kneading and tapotement with the ulnar side of the fingers.

Chest: Preliminary breathing; effleurage begins on the neck and is carried downward on each side of the sternum; then kneading and friction of the pectoral muscles and intercostal spaces. This manipulation must be carried out more gently than that on the back or limbs, for these tissues will not tolerate being so vigorously manipulated.

Massage of the Breast: Gentle stroking, grasping, and impressing, beginning at the periphery of the breast and working toward the nipple. The parts should be well lubricated, and great care taken to avoid so great a pressure as to bruise the tissues. The manipulation should not be undertaken unless the breast contains milk, as otherwise more harm than good will often be done.

Abdomen: Preliminary deep breathing, chest lifting, effleurage, palm kneading over the whole abdomen, then kneading in the direction of the colon, shaking and vibration. In constipation, the following movements are often prescribed:

- (1) Passive flexion and extension of legs;
- (2) Resistive flexion and extension of legs;
- (3) Passive circumduction of legs;
- (4) Resistive abduction and adduction of legs;
- (5) Active slow raising of legs to vertical position; followed by slowly lowering the legs;
- (6) Slow raising up and lying down of trunk, legs being fixed.

Massage of the Head: Effleurage on forehead, friction on the temples, pressure on each supraorbital nerve, thorough friction over the whole head, thorough moving of the scalp on the skull, double pressure with both hands, with or without vibratory motion, tapotement with finger-tips.

After general massage the patient should have a sensation of comfort, whereas during, and sometimes for a little while after, local treatment pain may often be unavoidable. Duration for local treatment, ten to twenty minutes; for general massage, from twenty

minutes to one hour. The head is not necessarily included in general massage.

Local Massage: To relieve sensitive parts when applying local treatment, administer first derivative massage to the tissues above and below the affected part, especially between the affected part and the heart.

The patient should be clad in a loose gown, and care should be taken to keep the body well covered, with the exception of the part undergoing manipulation. The patient should be placed in an easy and comfortable position, with the joints midway between flexion and extension. The operator should take care to be neither too near nor too far away; if too near the patient, the movements will be cramped for want of space, thereby becoming indefinite and lacking in strength. Apply as much of the surface of the hands and fingers as possible to the part operated upon, in order that no time be lost in working, and also that pressure may be evenly distributed. Each manipulation should be begun moderately, gradually increasing in force and frequency to the fullest desirable extent, and should end as gradually as it was begun.

If more agreeable to the patient, talcum powder or pure vaseline may be used as a lubricant; other greasy substances are to be avoided, as the fingers will slip and prevent the hands and fingers from seizing, grasping, and kneading the tissues; except where the skin is extremely sensitive.

Always bear in mind the anatomy of the body, the outlines of the bones, the location of the principal arteries, veins, and muscles.

[These notes have been compiled by Miss Biermann for the use of her pupils at the German Hospital, and, being the work of a registered nurse who has given special study to the subject both at home and abroad, they are reprinted for the benefit of the JOURNAL readers.—ED.]

